

The Storm Water Pollution Prevention Bulletin is prepared by the Storm Water Compliance Review Task Force to aid all projects and operations in maintaining compliance with the National Pollutant Discharge Elimination System (NPDES) permit requirements.

As this record winter season draws to a close, it is helpful to review factors other than storm water management that can affect the function or implementation of Best Management Practices (BMPs). One factor that affects all construction sites is the requirement for the contractor to construct public improvements while providing for public safety. The topic of this bulletin addresses one such issue that is particularly relevant in this year of record rainfall: the balance between traffic safety and storm drain inlet protection.

PUBLIC SAFETY

In the perceived conflict between traffic safety and inlet protection, drain inlet protection is the loser. However, both goals can be achieved with proper planning and use of the BMPs. Drain inlet protection can potentially impact traffic safety in two ways: (1) the protection may cause excessive ponding of water into the traffic lanes, and (2) a

vehicle may collide with drain inlet protection devices or materials resulting in loss of control.

WINNING STRATEGIES - THE UPHILL BATTLE

To maintain public safety, use of drain inlet protection in the traveled way on active roadways should be minimized. To accomplish this, sediment control should take place before storm water discharges reach storm drain inlets adjacent to traffic. This can be achieved by implementing required winter season soil stabilization controls and by installing effective sediment control measures upstream of the inlet.

ALTERNATE METHODS AND PRODUCTS

If inlet protection near traffic lanes is implemented, experienced construction personnel should determine if the placement of inlet protection, such as sandbags, poses a traffic hazard. In some districts, placing sandbags adjacent to traveled ways on state highways is not allowed. One way to reduce the ponding hazard

of sandbags is to fill them with gravel. Gravel bags allow greater flow of water than sandbags, thus reducing the potential for ponding.

To avoid the obstacle hazard created by the use of sandbags, an alternate product or method may be employed. For drop inlets, for example, an alternative is to wrap filter fabric around the grate to provide protection. Various weaves and thickness for filter fabrics are available to provide options for regulating flow and ponding.

New products developed to protect inlets from silt, sediment, and debris are introduced to the

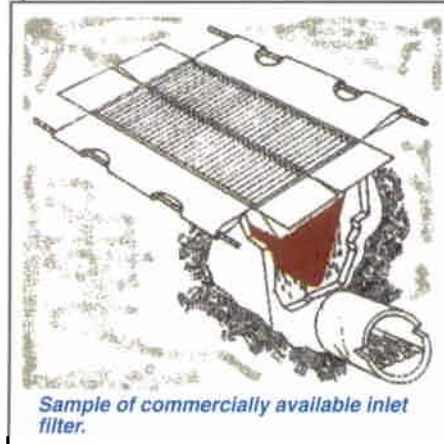
market on an on-going basis. These products are configured to fit most inlet types and are reusable. Some filters are designed to be used inside inlets

to allow traffic to flow unimpeded and to protect the filter from damage.

New drain inlet protection methods and products must be implemented with care and planning, following the procedures defined in Section 5 of the *Caltrans Storm Water Quality Handbook, Construction Contractors Guide and Specifications*. This process includes obtaining the approval of the Resident Engineer and incorporating additional details and/or manufacturer's data sheets in the Water Pollution Control Program (WPCP) or Storm Water Pollution Prevention Plan (SWPPP).



Unprotected drop inlet, adjacent to traffic lane, may be best protected with upstream soil stabilization and sediment controls.



Sample of commercially available inlet filter.

*Traffic Safe
Storm Drain
Inlet
Protection
(CD40)*



Additional information is available in the *Caltrans Storm Water Quality Handbooks*. Questions or comments may be directed to:

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